



Zora Program Users Manual



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August 2006

Rev: 1



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Online version available at http://ase.tufts.edu/devtech/vclc/CH_Zora_Manual.html

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WELCOME TO ZORA

About Zora

Designed by Professor Marina Bers, Zora is a multi-user graphical environment specifically developed to help users design and inhabit a virtual city. Several users can interact and communicate with each other in real time through a chat system. Users can populate the virtual city with their own interactive creations. They can design objects, characters, personal spaces, and a virtual community. Users can make avatars to represent themselves and develop their corresponding profiles that specify personal heroes and villains, cherished values, and biographies.

Zora is a web-based environment explicitly designed to help young people explore issues of identity and to promote positive development through the use of technology. The first version of Zora was developed while Prof. Bers was conducting her doctoral work at the MIT Media Lab, using the Microsoft Virtual Worlds development platform. The current version of Zora is being developed at Tufts University by Prof. Bers, her team of students in the DevTech Research Group, and the Academic Technologies department using the Active World™ Platform.

In previous research, Zora has been used by:

- (1) A multicultural group of teenagers in a summer workshop to express their sense of self and to explore the relationship between identity and moral value;

(2) Young patients in the Dialysis Unit at Children's Hospital Boston to create a social network to facilitate mutual support among patients and to foster new kinds of interactions with hospital staff;

(3) Undergraduate students at Tufts University to explore issues of civic engagement and campus involvement.

For more information about projects involving Zora, please visit:

<http://ase.tufts.edu/devtech/vclc/CHhome.html>

Code of Conduct

(1) Users will not use, identify, or indicate personal information including last names, phone numbers, or street address to ensure user privacy and security.

(2) Users will behave responsibly and appropriately. Users will not use inappropriate words in any part of the Zora application, including but not limited to:

- (i) chat
- (ii) telegram
- (iii) personal and object profiles
- (iv) values and definitions
- (v) stories
- (vi) other written or electronic exchanges in Zora.

(3) Users will ask questions of researchers and coordinators before proceeding with any activities that are not completely clear or understood.

(4) Users will report bugs and technical problems to researchers/coordinators when encountered.

RECOMMENDED SETUP

Minimum System Requirements:

- (1) Pentium CPU 300Mhz or equivalent
- (2) 64MB Memory
- (3) Microsoft Windows (98, Me, NT4, 2000, or XP)
- (4) DirectX 7 or later
- (5) Windows Media Player 6.4 or later
- (6) Direct3D video card with at least 8MB and the latest drivers

Recommend System Requirements (for the best possible experience):

- (1) Pentium III CPU 750Mhz or better
- (2) 128MB Memory / 256MB Memory
- (3) XP Microsoft Windows 98, Me, 2000, or XP
- (4) 500MB free disk space
- (5) DirectX 8.1 or later
- (6) Windows Media Player 9 or later

(7) 3D accelerated video card with at least 16MB and the latest drivers

Software Requirements

In order to run in Direct3D accelerated mode, Zora requires at least DirectX 7.0 or later. If you do not have at least DirectX 7.0 on your computer and want to run in Direct3D mode, you should download and install the latest DirectX from Microsoft.

(<http://www.microsoft.com/windows/directx>). OpenGL and software modes do not require DirectX.

Good performance in Direct3D and OpenGL modes also requires that you have the latest drivers installed for your 3D video-card. See our Video-troubleshooting page (Page 28) for help with video drivers.

Internet Connection

You must have an active connection to the Internet in order to access Zora. In addition, if you are running behind a firewall, Zora must be properly configured properly (Page 29).

Hard Disk Space

The initial install of Zora will take less than 5MB of space on your hard disk. However, as you travel in Zora, the objects you encounter are cached to disk for faster loading on your next visit. This can require a substantial amount of additional disk space. We recommend that you have at least 300MB free on your hard disk at all times for best performance.

GETTING STARTED

Installation

Because the installation process might be different for each user, please refer to the separate Installation Guide distributed to you along with this manual.

Logging in



To log into the World, please double click on the icon on your desk top or in the c:

Zora Upgrades

Occasionally you will start up Zora and see the following (Figure 5):

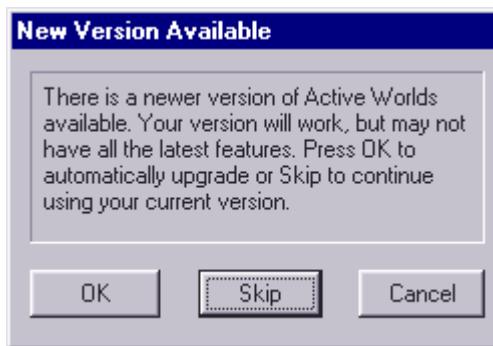


Figure 1. Zora update screen.

You may also receive this message when you are already in Zora. If you click the OK button, the Zora Browser will automatically download the new version and install it. Once the upgrade is complete, Zora will automatically restart.

Sometimes, the skip button will not be available. This is known as a forced upgrade.

Periodically, changes are made to the Zora architecture that make older browsers incompatible and therefore unusable. In this case, your only option will be to press OK to accept the new version.

If you ever have difficulty receiving the automatic upgrade, it may be easier to simply return to the Zora Download Page and download the latest browser as a complete install.

Layout, Toolbars, & Buttons

I. Zora Layout

Figure 1 shows the optimal layout for using Zora.

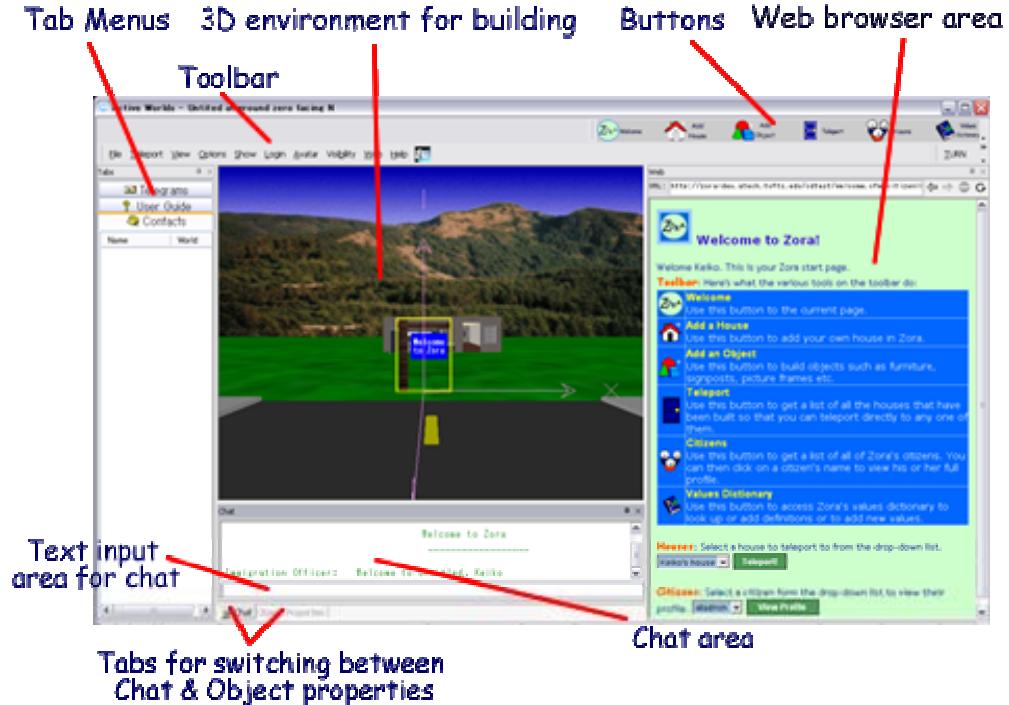


Figure 2. Optimal layout for using Zora.

However, when you start Zora for the first time you might find that the web browser only expands when you click on buttons or objects. If you want the browser to remain expanded, you can click on the Tack symbol on the top right hand corner next to the cross (Figure 2). If you accidentally close the browser, you can get it back by right-clicking on an object or by clicking on a button.

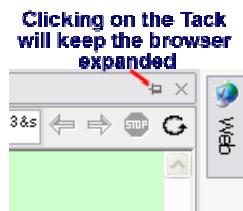


Figure 3. Tack button to keep the browser expanded.

You can also dock any of the properties or chat windows by dragging it over one of the blue positioning anchors (as shown in Figure 3).

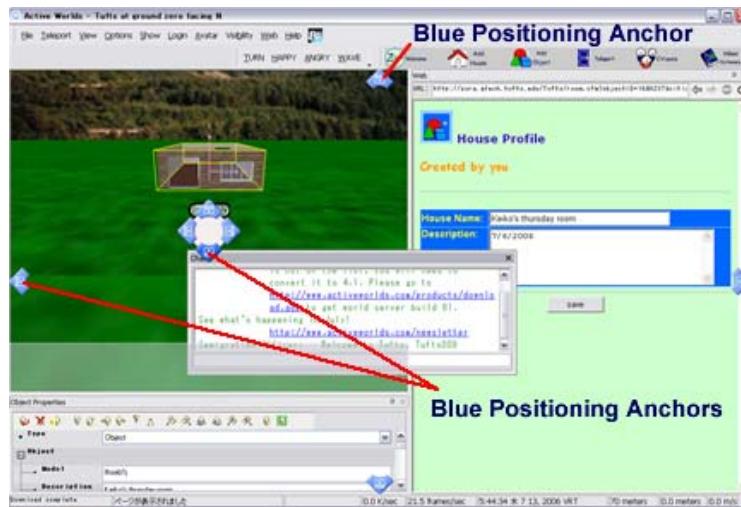


Figure 4. Re-docking windows.

II. Zora Toolbar



Figure 5. The Zora toolbar.

- **File:** Allows you to close the program by clicking “Exit.”
- **Teleport:** Allows you to move between worlds when multiple worlds are in use.
- **View:** Controls how you see the world.
 - Look up, look down, look level: changes the direction of your gaze.
 - First person: normal view.
 - Third person: Birds-eye view of the world.
- **Options:** Advanced controls are available here.
- **Show:** Clicking on different items from this list will control what additional tool bars you see or hide on screen.
- **Login:** Allows you to log into the system.
- **Avatar:** Allows you to change your avatar by choosing a character from the list. The menu contains a list of all the avatars available to your world (see Page 12)
- **Visibility:** Allows you to quickly and easily change the distance you can see.
- **Web:** Controls the browser area of the program.
- **Help:**
 - **User Guide** opens the integrated help Wizard about the Zora program.
 - Choosing **About** opens a box containing copyright notices, version information, and your citizen number.

III. Zora Menu Buttons



Zora menu buttons allow you to access various Zora functions such as creation of new object and citizen profiles.

-  **Welcome page:** Please see *Using Zora: Welcome Screen* (Page 16)
-  **Add House page:** Please see *Using Zora: Add house* (Page 17)
-  **Add Object page:** Please see *Using Zora: Add Object* (Page 18)
-  **Teleport:** Please see *Using Zora: Teleport* (Page 20)
-  **Citizens:** Please see *Using Zora: Citizens* (Page 23)
-  **Values Dictionary:** Please see *Using Zora: Values Dictionary* (Page 24)

USING ZORA

Avatar Profile

When you login to Zora for the first time, you will see the following information in the browser prompting you to enter your name and some biographical page to set up your profile..



Figure 6. Zora Initial Profile Screen.

Avatar Setup

Initially, everyone in Zora is assigned the default “tourist” avatar. You can change your avator image by selecting a different one from the Avatar Toolbar.



Figure 7. Zora Initial Profile Screen.

Welcome Screen

After initial personal profile setup, the Welcome Screen is the first screen you will see when



you login to Zora and you can return to it at any time by clicking on on the menu bar.

It gives you a brief description of the other pages you can access.

The screenshot shows the Zora Welcome Screen. At the top, there is a toolbar with several buttons: Welcome, Add a House, Add an Object, Teleport, Citizens, and Values Dictionary. Below the toolbar, there is a section titled "Welcome to Zora!" with the message "Welcome Tufts021. This is your Zora start page." A "Toolbar" section provides descriptions for each button. At the bottom, there are two dropdown menus: "Houses" and "Citizens", each with a "View Profile" button.

| Toolbar Button | Description |
|-------------------|--|
| Welcome | Use this button to view the current page. |
| Add a House | Use this button to add your own house in AWZora. |
| Add an Object | Use this button to build objects such as furniture, signposts, picture frames etc. |
| Teleport | Use this button to get a list of all the houses that have been built so that you can teleport directly to any one of them. |
| Citizens | Use this button to get a list of all of AWZora's citizens. You can then click on a citizen's name to view his or her full profile. |
| Values Dictionary | Use this button to access AWZora's values dictionary to look up or add definitions or to add new values. |

Houses: Select a house to teleport to from the drop-down list.
Teleport Room Teleport

Citizens: Select a citizen from the drop-down list to view their profile.
chrispeg

Figure 8. Zora Welcome Screen.

Add House



Use this button to add your own house in Zora—it will take you to a page where you can choose the type of house you would like. You can name and add a description to this house by typing information into the appropriate text boxes and click “Build House”.



The screenshot shows a web page titled "Add a New House" with a sub-instruction "Fill out the form below and press the "Add House" button to make your house." The form consists of four rows of input fields:

| | | |
|--------------------|----------------|--|
| House Category: | Personal House | |
| House Model: | Personal House | |
| House Name: | | |
| House Description: | | |

At the bottom of the form is a blue "Build House" button.

Figure 9. Page for adding a house in Zora.

Add Object



By clicking on this button in the menu, you will be taken to a page where you can choose object category and type from a pull-down menu.

| | | |
|------------------|-------------|--|
| Object Category: | Electronics | |
| Object Type: | Computer | |
| Name: | | |

Create Object

Figure 10. Page for adding a new object in Zora.

You can also add pictures and photographs by uploading an image to a Picture Frame and artifacts. To do this, the image must be saved in JPEG, PNG or GIF format. The program will not accept Bitmap images. Also, the image title must not be more than one word (e.g. “myCat.gif” and not “my cat.gif”).

Once the object is created and appears in Zora, right-clicking on it will bring up its profile page in the browser side as shown in Figure 11.



Figure 11. Viewing an object's profile in Zora.

Profile: This is where you can edit the object's name and its description (see Page 14 for more information).

Make Hero: This allows you to designate this object as a hero object (see Page 20 for more information).

Make Villain: This allows you to designate this object as a villain object (see Page 20 for more information).

Assign values: This allows you to assign a specific value to this object (see Page 21 for more information).

Stories: This allows you to add a story about this object.

Heroes, Villains and Values

After you create an object, you can assign properties to the object in the Object Profile by right-clicking on the object. For example, you can designate your object to be a Hero by clicking on the “Make Hero” button.



Figure 12. Designating an object as a Hero in Zora.

You can designate your object as a Villain in the same way by clicking on the “Make Villain” button. You can also reverse your designation by clicking on the “Yes” button when it asks whether you want to reassign the properties.

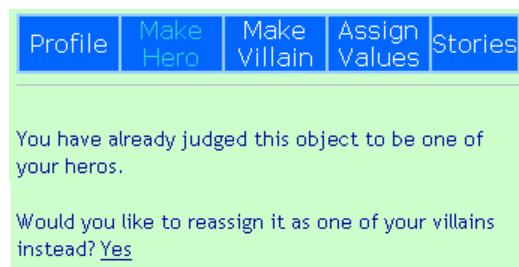


Figure 13. Changing an object from a Hero to a Villain in Zora.

You can also assign values to your objects by clicking on the “Assign values” button. This will bring you to a page where it will remind you whether a value has been assigned to the object yet and at this point you have the option of assigning a value from an existing list from a pull-down menu or to create a completely new value.

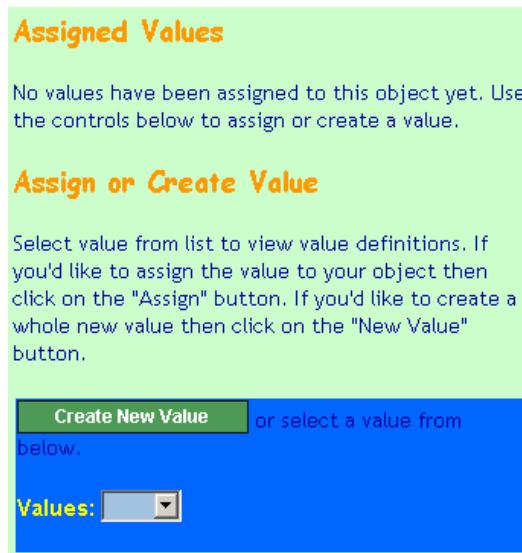


Figure 14. Assigning Values for an object in Zora.

To remove an assigned value from an object, click the “remove value” button next to the value.



Figure 15. Removing an assigned Value from an object in Zora..

Teleport



To teleport to a house in Zora, click on  in the toolbar. This will bring up the teleport page in the web browser.

The teleport page lists all the houses created in the world.

| Zora Houses | |
|---|--|
| Click on a room name to teleport to that house! | |
| Name of the house (in yellow) | Clement's House created by Tufts007 This is my dream home |
| Who made the house | Keiko's Lab created by Tufts006 Testing |
| Description of the house | Keiko's thursday room created by Tufts009 7/6/2006 |
| | Vacation Home created by Tufts007 This is where I would like to go during my summer holidays when it gets hot |

Figure 16. Teleport page in Zora showing all the houses created in the world.

By clicking on the name of the house (the yellow link), you will see this message and you will be teleported to the house:

| |
|---|
| Keiko's Lab created by Tufts006 Testing |
| Teleporting now. Please wait |
| Keiko's thursday room created by Tufts009 7/6/2006 |
| Vacation Home created by Tufts007 |

Figure 17. Teleportation notice.

Citizens



By clicking on this button on the menu, you are taken to a page that lists all the citizens in Zora and you can tell who is online. You can update your own profile by clicking the green “Update my profile” button above the list. This green button which will take you to a page where you can update your information.

| Name | Bio | Online |
|---------|--|--------|
| atadmin | | - |
| Clement | | - |
| Keiko | I am a graduate student who loves playing with games | YES |
| Marina | | - |
| Matt | I am the systems administrator for AT. | - |
| Steve | | - |

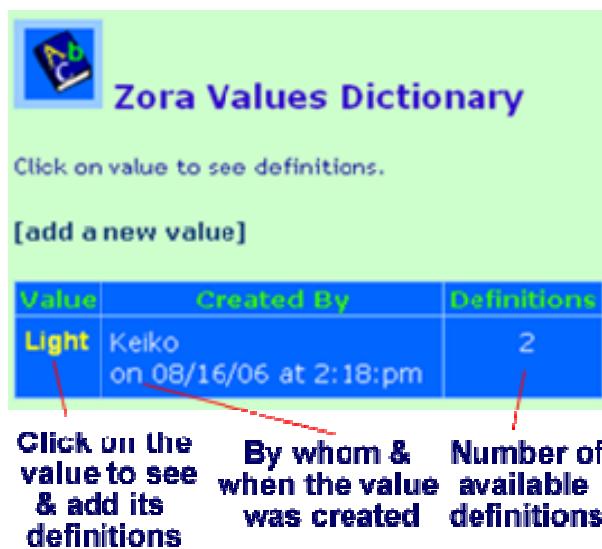
Figure 18. Page showing the citizens of Zora.

Values Dictionary

The Values Dictionary is a collaborative dictionary that represents all values and their multiple definitions held by the Zora community. Initially, the dictionary is empty but it will grow as users start to populate the virtual city with objects and characters and define the values and definitions associated with them.



Clicking on  will take you to the main page of the Values Dictionary where you can view all existing values created by the community. The table will also have information about who created each value and when each value was created as well as the number of definitions attached to each value. By clicking on the values themselves (in yellow), it will open a page that lists all the definitions users have written for that value.



| Value | Created By | Definitions |
|-------|---------------------------------|-------------|
| Light | Keiko on 08/16/06 at 2:18:pm | 2 |

Click on the value to see & add its definitions
By whom & when the value was created
Number of definitions available

Figure 19. Page of Zora Values Dictionary.

Chat

Talking to other users, or "chatting," in Zora is similar to chatting in any other Internet chat environment. Simply type whatever it is you would like to say and hit the ENTER key. Your words will be sent to everyone else nearby. Similarly, whatever words other people type will be sent to you and will appear on your screen.



Figure 20. Chatting in Zora.

Technical Issue FAQ

Q. Why can't I see new pictures that I uploaded into Zora or new objects that were made available recently?

A. Your cache might not have refreshed properly since you restarted Zora. Exit zora and go to:

C: → Program Files → Zora and delete the whole “Cache” folder by selecting and dragging the folder into the trash can. Restart Zora and all images will be refreshed.

Q. When I run the installer I get a "Corrupt Install Detected" error. What is the problem?

A. The most common cause for this error is an incomplete download of the installer. Try downloading the installer again from:

http://ase.tufts.edu/devtech/vclc/CH_Zora.html.

If you continue to experience this problem, please contact the Zora administrator. Contact information is available on Page 31.

Q. When I start Zora it never connects. I am behind a firewall.

A. If you are behind a firewall you will need to configure your firewall to allow Zora to run. See Technical Issue: Firewalls and Proxy Servers (Page 29).

Q. When I start Zora it says "Unable to initialize Internet functions (reason 12167)" What is causing this?

A. This error is coming from an Internet Explorer configuration problem. Usually a bad URL has been specified in the VIEW/OPTIONS/ADVANCED/AUTOMATIC CONFIGURATION window. Locate the Automatic Configuration settings in your installation of Internet Explorer and delete any URLs that are specified there.

Video Problems

If you are having video-related problems, the Zora 3D platform developer provides some resources to help you troubleshoot.

Q. Why am I having trouble with video?

A. While 3D hardware acceleration often brings greatly enhanced levels of performance to Zora, it may also bring some annoying complications, due to the enormous number of different 3D video cards out there. Some video cards might have bugs which adversely affect performance, cause bizarre rendering errors, or in extreme cases cause Zora to crash or even the entire PC to lock up, requiring a reboot. Each video card also has many different possible software driver versions that may be installed on a particular PC, and some drivers may work better than others. The **latest driver** available for your 3D video card **has the best chance of working well with Zora** or for that matter with any software on your computer in Direct3D and/or OpenGL modes.

Firewalls and Proxy Servers

If you are having firewall related problems, the Zora 3D platform developer provides some resources to help you troubleshoot.

Q. Why can't I connect when my Internet is working?

A. Firewalls are either computer programs or hardware that restrict access in to and out of a network. Most corporate networks have firewalls installed for added security. Many home users are now installing firewalls on their home networks as well.

Since firewalls block the vast majority of Internet traffic, in the past they have often prevented the Zora browser from being able to contact the Zora server, and thus prevented users who are on firewall networks from accessing Zora at all. This has been a particularly common problem in corporate environments.

For step-by-step instructions to troubleshoot your video problems, please click on your firewall program below:

- **Norton Internet Security:** http://www.activeworlds.com/help/firewall_norton.html
- **Windows Firewall** (Windows 200, XP):
http://www.activeworlds.com/help/firewall_docs.html
- **ZoneAlarm:** <http://www.activeworlds.com/help/zonealarm.html>

CONTACT & RESOURCES

- For general questions about what we do:

Professor Marina Bers at marina.bers@tufts.edu

- For general assistance about the research project:

Laura Beals at laura.beals@tufts.edu

- For technological assistance:

Keiko Satoh at keiko.satoh@tufts.edu